Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (Currently Amended) A multiple camera video system, comprising:

a plurality of cameras that each capture image and audio data, wherein each camera ~~having~~ has a microphone, wherein said plurality of cameras include a master camera and a plurality of slave cameras, whereby said master camera is configurable to point ~~pointing~~ at a target, wherein said target includes an RF transmitter that transmits positional coordinates;

a master monitoring unit, coupled to said master camera and adapted to receive said positional coordinates from said target, that positions said master camera and determines, based on parameters of said master camera, slave parameters of said plurality of slave cameras, wherein said master camera and said plurality of slave cameras are positioned around a scene including said target, wherein said parameters of said master camera include camera tilt angle, focal distance to said target, and ground distance to said target; ~~and~~

wherein said master monitoring unit, which is coupled to said plurality of slave cameras, transmits said slave parameters to at least one slave camera ~~from said plurality of slave cameras~~, wherein said slave ~~parameter~~ parameters are used to adjust said at least one slave camera so a size of said target in an image from said master camera and said at least one slave camera is substantially the same, wherein said master monitoring unit also includes a storage device for storing said image and audio data from said plurality of cameras; and wherein said master monitoring unit overlays

an output from each of said microphones in the same moment of time based on the speed of sound and a distance from each of said microphones to said target; and

means for streaming said image and audio data from each of said plurality of cameras to a remote third party, whereby said third party can view said image and audio data as desired.

2. (Previously presented) The system of Claim 1, wherein said master monitoring unit is remote from said plurality of cameras.

Claim 3. (Cancelled)

4. (Previously presented) The system of Claim 1, wherein said master camera includes a zoom adjustment.

Claims 5 and 6. (Cancelled)

7. (Original) The system of Claim 1, further comprising:

a plurality of robotic pan heads upon which each of said plurality of cameras is mounted for remotely controlling said plurality of cameras.

8. (Original) The system of Claim 7, wherein said robotic pan heads include a pan and tilt function.

9. (Previously presented) The system of Claim 8, wherein the pan and tilt axes of the robotic pan heads intersect at a point within the body of said plurality of cameras, respectively.

10. (Previously presented) The system of Claim 1, further comprising:

at least one paint station connected to said master monitoring unit .

11. (Previously presented) The system of Claim 10, wherein said at least one paint stations comprises:

a monitor;

an input device; and

a paint station computer running paint station software.

12. (Original) The system of Claim 11, wherein said paint station is capable of adjusting an attribute of at least one of said plurality of cameras.

13. (Original) The system of Claim 12, wherein said attribute is selected from the group consisting of red paint, green paint, blue paint, shutter, iris, zoom, and focus.

14. (Original) The system of Claim 12, wherein the paint station can adjust said attribute on more than one of said plurality of cameras simultaneously.

15. (Previously presented) The system of Claim 12, wherein said camera attribute can be adjusted while said slave parameters are being automatically controlled by the master monitoring unit.

16. (Original) The system of Claim 12, wherein the number of said at least one paint stations is at least one-fifth the number of cameras.

17. (Original) The system of Claim 1, further comprising: at least one calibration station.

18. (Original) The system of Claim 17, wherein said at least one calibration station is capable of creating a point calibration table for each of said plurality of cameras.

19. (Original) The system of Claim 17, wherein said at least one calibration station is capable of creating a zoom calibration table for each of said plurality of cameras.

20. (Original) The system of Claim 17, wherein said at least one calibration station is capable of creating a focal calibration table for each of said plurality of cameras.

21. (Original) The system of Claim 17, wherein the number of said at least one calibration station is at least one-fifth the number of cameras.

22. (Original) The system of Claim 1, further comprising: at least one video storage device.

23. (Original) The system of Claim 22, wherein said at least one video storage device is a plurality of digital disc recorders.

24. (Original) The system of Claim 22, wherein said at least one video storage device is a file server.

25. (Original) The system of Claim 23, further comprising:

a digital router connecting the outputs of each of said plurality of digital disc recorders; and

a first slow motion controller.

26. (Original) The system of Claim 25, wherein said slow motion controller is capable of selecting a router output from the plurality of digital disc recorders.

27. (Original) The system of Claim 25, wherein said slow motion controller is capable of controlling each of the plurality of digital disc recorders simultaneously.

28. (Original) The system of Claim 27, wherein said slow motion controller is capable of controlling the forward and backward motion of the output of each of said plurality of digital disc recorders.

29. (Original) The system of Claim 25, further comprising:

an additional digital disc recorder connected to the output of said digital router.

30. (Original) The system of Claim 29, further comprising:

a second slow motion controller for controlling the output of said additional digital disc recorder.

31. (Previously presented) The system of Claim 1, further comprising:

a communications medium coupling the plurality of cameras to said master monitoring unit.

32. (Original) The system of Claim 31, wherein said communications medium is fiber optic cable.

33. (Original) The system of Claim 32, wherein said fiber optic cable is multi-mode fiber optic cable.

34. (Original) The system of Claim 31, wherein said communications medium is triaxial cable.

35. (Original) The system of Claim 34, wherein a semiconductor in said triaxial cable is used to modulate camera telemetry information and captured image data.

36. (Original) The system of Claim 31, wherein said communications medium is a wireless RF connection.

37. (Original) The system of Claim 1, further comprising: a cam-A computer.

38. (Previously presented) The system of Claim 1, further comprising:

a microphone computer for combining the outputs of said microphones.

39. (Original) The system of Claim 38, wherein said microphones are directional microphones.

40. (Previously presented) The system of Claim 38, wherein said microphones are spaced around a target that is being recorded.

Claim 41. (Cancelled)

42. (Previously presented) The system of Claim 40, wherein the speed of sound includes an adjustment for the altitude of the microphone and the relative humidity at the site of the microphone.

43. (Previously presented) The system of Claim 40, wherein the output of each of said microphones is connected to a digital mixer which is controlled by said microphone computer.

Claims 44-79. (Cancelled)

80. (Withdrawn) A system for servoing on a moving target within a dynamic scene, comprising: a master variable pointing camera system; a plurality of slave variable pointing camera systems, wherein the slave variable pointing camera systems and the master variable pointing camera system are positioned around the scene; a master control unit in communication with the master variable pointing camera system for determining, based on parameters of the master variable pointing camera system and mapping data between the master variable pointing camera system and the slave variable pointing camera systems, parameters for each of the slave variable pointing camera systems such that, at a point in time, the master variable pointing camera system and the slave variable pointing camera systems are aimed at the target and a size of the target in an image from each of the master variable pointing camera system and the slave variable pointing camera systems is substantially the same; and a plurality of slave camera control units in communication with the master control unit, wherein each slave camera control unit is for controlling at least one of the slave variable pointing camera systems based on the parameters for each of the slave variable pointing camera systems, wherein the mapping data includes: data regarding the geometric relationship of the camera systems to the scene; data regarding the relationship between the zoom and the angular field of view for

each camera system; and data regarding the relationship between the focus and the depth of field for each camera system.

81. (Withdrawn) The system of claim 80, wherein the parameters of the master variable pointing camera system and the parameters for the slave variable pointing camera systems include pointing parameters and optical parameters.

82. (Withdrawn) The system of claim 81, wherein: the master variable pointing camera system includes a master pan/tilt camera system; and the plurality of slave variable pointing cameras includes a plurality of slave pan/tilt camera systems.

83. (Withdrawn) The system of claim 82, wherein the wherein the parameters of the master variable pointing camera system and the parameters for the slave variable pointing camera systems include pan, tilt, zoom and focus parameters.

84. (Withdrawn) The system of claim 81, further comprising a video image sequence generator in communication with the master control unit and the slave camera control units.

85. (Withdrawn) The system of claim 84, wherein the video image sequence generator is for generating a video image sequence of the target by outputting an image from certain of the master variable pointing camera system and the slave variable pointing camera systems in sequence according to the position of the master variable

pointing camera system and the slave variable pointing camera systems around the scene.

86. (Withdrawn) The system of claim 84, further comprising a computer vision control unit in communication with the master control unit and the master variable pointing camera system.

87. (Withdrawn) The system of claim 84, further comprising a remote operator interface unit in communication with the master control unit and the master variable pointing camera system.

88. (Withdrawn) The system of claim 84, wherein the master control unit includes: a target determination module for determining a position of the target within the scene and a size of the target at the position in an image from the master variable pointing camera system based on the parameters of the master variable pointing camera system; and a slave control module in communication with the target determination module for determining the parameters for each of the slave variable pointing camera systems based on the position of the target and the size of the target in the image from the master variable pointing camera system.

89. (Withdrawn) The system of claim 85, wherein the image sequence generator is for outputting images from each of the master variable pointing camera system and the slave variable pointing camera systems according to their position around the scene, wherein the images are from a common point in time so as to generate a 3 D stop-motion

video image sequence.

90. (Withdrawn) A method for servoing on a moving target within a dynamic scene, comprising: reading parameters of a first variable pointing camera system; determining parameters for a plurality of other variable pointing camera systems based on the parameters of the first variable pointing camera system and mapping data for the camera systems, wherein the first variable pointing camera system and the plurality of other variable pointing camera systems are positioned around the scene, such that, at a point in time, each of the variable pointing camera systems is aimed at the target and a size of the target in an image from each of the variable pointing camera systems is substantially the same; and controlling the plurality of other variable pointing camera systems based on the parameters for the plurality of other variable pointing camera systems wherein the mapping data includes: data regarding the geometric relationship of the camera systems to the scene; data regarding the relationship between the zoom and the angular field of view for each camera system; and data regarding the relationship between the focus and the depth of field for each camera system.

91. (Withdrawn) The method of claim 90, wherein: reading parameters of the first variable pointing camera system includes reading mechanical and optical parameters of the first variable pointing camera system; and determining parameters for the plurality of other variable pointing camera systems includes determining mechanical and optical parameters for the plurality of other variable pointing camera systems.

92. (Withdrawn) The method of claim 91, wherein the first variable pointing camera system includes a first pan/tilt camera system, wherein the plurality of other variable pointing camera systems include a plurality of other pan/tilt camera systems, and wherein: reading parameters of the first pan/tilt camera system includes reading pan, tilt, zoom and focus parameters of the first pan/tilt camera system; and determining parameters for the plurality of other pan/tilt camera systems includes determining pan, tilt, zoom and focus parameters for the plurality of other pan/tilt camera systems.

93. (Withdrawn) The method of claim 90, further comprising: storing digitized, time-stamped images from the variable pointing camera systems; and generating a video image sequence of the target by outputting an image from certain of the variable pointing camera systems in sequence according to the position of the variable pointing camera systems around the scene.

94. (Withdrawn) The method of claim 90, wherein determining parameters for the plurality of other variable pointing camera systems includes: determining a position of the target within the scene and a size of the target at the position in an image from the first variable pointing camera system based on the parameters of the first variable pointing camera system; and determining the parameters for each of the other variable pointing camera systems based on the position of the target and the size of the target in the image from the first variable pointing camera system.

95. (Withdrawn) The method of claim 90, further comprising selecting one of the other variable pointing camera systems to be the first variable pointing camera system.

96. (Withdrawn) The method of claim 93, wherein generating the video image sequence includes generating a 3 D stop-motion video image sequence of the target by outputting images from each of the variable pointing camera systems according to their position around the scene, wherein the images are from a common point in time.

97. (Withdrawn) A system for servoing on a moving target within a dynamic scene, comprising: a plurality of master variable pointing camera systems; a plurality of slave variable pointing camera systems, wherein the slave variable pointing camera systems and the master variable pointing camera systems are positioned around the scene; at least one master control unit in communication with each of the master variable pointing camera systems for determining, based on parameters of the master variable pointing camera systems and mapping data for the camera systems, parameters for certain of the plurality of the slave variable pointing camera systems such that, at a point in time, each of the master variable pointing camera systems and the slave variable pointing camera systems are aimed at the target and a size of the target in an image from each of the master variable pointing camera systems and the slave variable pointing camera systems is substantially the same; and a plurality of slave camera control units, each slave camera control unit in communication with at least one of the master control units, wherein each slave camera control unit is for controlling at least one of the slave variable pointing camera systems based on the parameters for each of the slave variable

pointing camera systems, wherein the mapping data includes: data regarding the geometric relationship of the camera systems to the scene: data regarding the relationship between the zoom and the angular field of view for each camera system; and data regarding the relationship between the focus and the depth of field for each camera system.

98. (Withdrawn) The system of claim 97, wherein the at least one master control unit includes a plurality of master control units, and wherein each of the master control units is in communication with at least one master variable pointing camera system and is for determining, based on parameters of the master variable pointing camera systems, parameters for certain of the plurality of the slave variable pointing camera systems such that, at a point in time, each of the master variable pointing camera systems and the slave variable pointing camera systems are aimed at the target and a size of the target in an image from each of the master variable pointing camera systems and the slave variable pointing camera systems is substantially the same.

99. (New) The system of claim 1, wherein different targets transmit said positional coordinates over different carrier frequencies.

100. (New) The system of claim 1, wherein said master monitoring unit stores a texture mesh of said scene.